

## PROJECT DESCRIPTION

## GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF AN INTERSECTION CONTROL BEACON AT THE INTERSECTION OF MIDDLETOWN ROAD AND I-83 NORTHBOUND RAMP IN BALTIMORE COUNTY, MARYLAND. MIDDLETOWN ROAD IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

## INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A FLASHING MODE WITH THE MIDDLETOWN ROAD AND I-83 NORTHBOUND OFF-RAMP SIGNAL INDICATIONS FLASHING RED.

## CONTROLLER REQUIREMENTS

INSTALL TWO-CIRCUIT FLASHER UNIT WITH PHOTOCELL, DIMMER SWITCH AND INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "S" BASE MOUNTED CABINET.

## PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7631 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

## MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.02-01 (SHOULDER WORK)

STANDARD NO. MD-104.02-09 (FLAGGING OPERATION)

STANDARD NO. MD-104.05-18 (PARTIAL RAMP CLOSURE)

## PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. ERIN KUHN  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 229-2381

MR. ANDRE FUTREL  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 229-2361

MR. MICHAEL PASQUARIELLO  
DISTRICT UTILITY ENGINEER  
PHONE: (410) 229-2341

MR. ROBERT SYNDER  
ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7631

MR. RICHARD L. DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

## EQUIPMENT LIST "A"

## A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EACH	TWO CIRCUIT FLASHER UNIT WITH PHOTOCELL, DIMMER SWITCH AND INTERSECTION MONITOR 11 WITH BATTERY BACK-UP FOR PHONE DROP HOUSED IN A NEMA SIZE "S" BASE MOUNTED CABINET
9571	23 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 1 EACH D-3(1) SIGN (VARIABLE x 16 IN.) - MAST ARM MOUNT - 1 EACH R3-1 SIGN (30 IN. x 30 IN.) - MAST ARM MOUNT - 1 EACH R3-2 SIGN (30 IN. x 30 IN.) - MAST ARM MOUNT

## EQUIPMENT LIST "C"

## C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

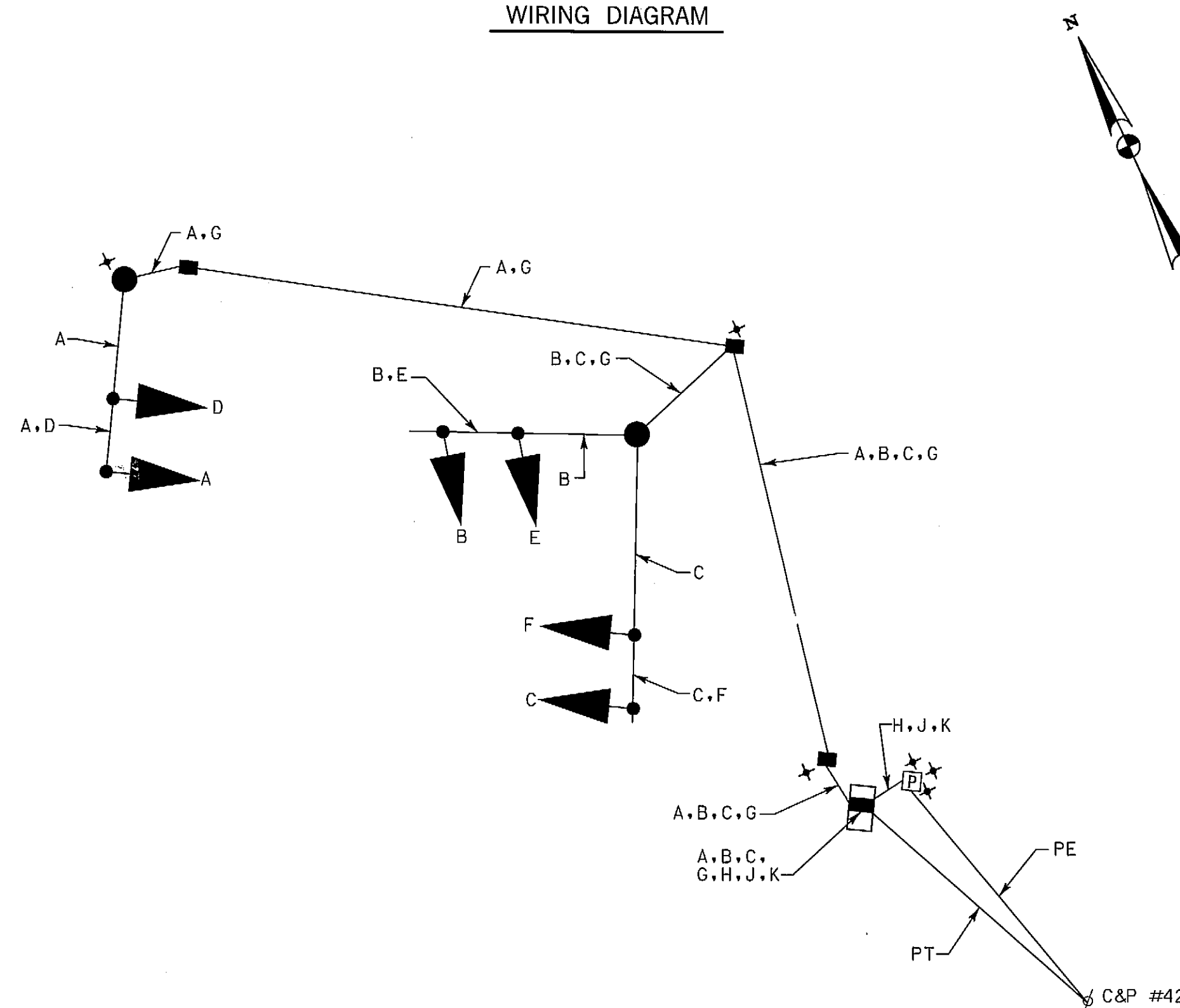
SHA FORCES SHALL REMOVE ALL AUXILIARY EQUIPMENT FROM THE CONTROL CABINET. ALL OTHER EQUIPMENT TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

## EQUIPMENT LIST "B"

## B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CATEGORY CODE	QUANTITY	DESCRIPTION
203030	3 C.Y.	TEST PIT EXCAVATION
585625	55 L.F.	24 INCH WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
800000	1 EACH	REM & DISPOSE MAT & EQUIP
801004	12 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
802501	205 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805118	160 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
805125	95 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805140	70 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
807500	1 EACH	EMBEDDED METERED SERVICE PEDESTAL
810022	70 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG - THHN/THWN
811001	3 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813015	23 S.F.	INSTALL OVERHEAD SIGN
818021	1 EACH	STEEL POLE WITH TWIN 50 FOOT MAST ARMS
818030	1 EACH	STEEL POLE WITH A SINGLE 38 FOOT MAST ARM
837001	6 EACH	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860272	6 EACH	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860292	3 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861107	60 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	650 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
871202	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT

## WIRING DIAGRAM



## WIRING KEY

- A, B, C } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D, E, F } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- G } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- H, J, K } 1-CONDUCTOR ELECTRICAL CABLE (NO. 8 A.W.G.)
- PT - PROPOSED UNDERGROUND TELEPHONE SERVICE
- PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE
- + - 3/4 IN. X 10 FT. GROUND ROD

## PHASE CHART

	1	2	3	4	5	6
	(R)	(R)	(R)	(R)	(R)	(R)
FLASHING OPERATION	FLR	FLR	FLR	FLR	FLR	FLR

**SHA**

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
BRIDGE REPLACEMENT  
STEEL GIRDER BRIDGE NO. 0321400  
ON MIDDLETOWN ROAD OVER INTERSTATE 83

## GENERAL INFORMATION SHEET

SCALE	NONE	DATE	APRIL 2012	CONTRACT NO.	BA4215180
DESIGNED BY	L.WAESCHE	COUNTY	BALTIMORE		
DRAWN BY	L.WAESCHE	LOGMILE	03083023.67		
CHECKED BY	N.LEARY	TMS NO.	L105		
F.A.P. NO.		TOD NO.			
TS NO.	4140A	DRAWING	TSP - 02	OF	2
				SHEET NO.	128 OF 139

**WR&A**  
WHITMAN, REQUARDT  
& ASSOCIATES, LLP  
801 South Caroline Street, Baltimore, Maryland 21231